

## 3.14 Visual Quality

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### Review of EIS Section and Previous Analysis

The original 1992 EIS visual quality analysis was reviewed to determine the changes in the visual environment of the study area and which aspects of the study are still valid over the intervening time. The original document covered the complete project. The viewer groups that were identified in the 1992 Final EIS include the following:

- Highway users on SR 520, SR 202, and SR 901 (West Lake Sammamish Parkway) who have views from the highway
- Adjacent properties with views toward the highway, including businesses, residences on the ridge west of West Lake Sammamish Parkway, trail users on the Sammamish River Trail, and some people who are visiting Marymoor Park

The following impacts were identified for the project in the 1992 Final EIS:

- Construction impacts would include removing trees and vegetation and allowing earth-movement activities, graded and filled areas, temporary erosion control and ground stabilization devices, bare slopes, and retaining walls to be viewed. Also, the clutter of construction activities would create disorder because of the presence of equipment, materials, signage, and staging areas. Light and glare would likely increase if construction takes place at night.
- Operation impacts would reduce existing vegetated areas and increase paved area due to the new ramps and wider roadways. The scale of the highway would change. The SR 520 and SR 202 interchange would change from an at-grade intersection to an elevated structure with ramps to SR 202, creating a more urban visual environment. The bridge structures and the embankments would become dominant elements and possible visual barriers for views from adjacent properties and SR 202. Viewers traveling along SR 520 would view the surrounding landscape from an elevated position rather than a level one. Elements throughout the project, such as retaining walls, fill slopes, embankments, and support columns, would be added to views toward the highway. The retaining wall on the south side of SR 520 was expected to impact views from Marymoor Park. Light and glare was expected to increase due to added glare from headlights and sun reflections from additional vehicles using the highway. Additional signage, traffic control devices, and luminaires would be added to views.

Mitigation measures that were originally identified included the following:

- Shield lighting from oncoming motorists and adjacent properties, if construction occurs at night.
- During operation, create vegetative buffers along roadside with trees, shrubs, and grasses that blend with the surrounding environment. Along Marymoor Park create vegetated buffers, possibly by obtaining construction easements from the Park. Work with the City of

Redmond to preserve significant trees and natural vegetation and to enhance city entrances by using architectural and landscape features. Design the new SR 520 bridge structures at the West Lake Sammamish Parkway to blend with existing structures. Throughout the entire project, WSDOT architects and landscape architects would coordinate visual elements of the highway, such as illumination, signage, structures, and walls, to achieve a unified visual environment. Luminaire shields would be included to prevent light from spreading to adjacent properties.

## Methodology

The methodology in the 1992 Final EIS was reviewed and determined to be valid. The reassessment has been conducted using the same guidelines and processes.

Using the original viewpoint locations, the project site was analyzed to compare the original and current site conditions. These viewpoints and the direction of the view are shown on Figure 3.14-1; photographs were taken to document current conditions.

## Coordination Efforts

The visual quality discipline team coordinated with the project design engineer. Plans were studied to provide an accurate understanding of the project and the changes that would occur to the existing environment.

## Affected Environment

Since the publication of the 1992 Final EIS, WSDOT has published its *Roadside Classification Plan*, which lists this section of the SR 520 corridor as Rural between MPs 6.80 and 11.51. Between MPs 11.51 and 12.81, it is listed as Semi-Urban. The *Roadside Classification Plan* defines the visual environment for highway roadsides, defines policy for roadside restoration, and outlines treatment strategies for restoring impacts on the roadside.

The viewer groups are the same as originally identified, but now there are additional viewers from adjacent properties where development has occurred since the original study. Additional viewer groups would include trail users along Bear Creek and those people visiting the commercial areas of the Redmond Town Center and retail establishments directly northeast of the interchange. Viewer sensitivity would be high for the trail user viewer group, similar to those in Marymoor Park, due to the activity they are engaged in and the speed at which views would occur.

The terrain features surrounding the study area remain unchanged; however, the previously built interchange rises above the flat topography of the area. In 1992, there was an at-grade intersection of SR 520 and SR 202. Now SR 520 passes over SR 202, with an entrance ramp from south SR 202 to westbound SR 520 and an exit ramp from northeastbound SR 520 to SR 202.

The adjacent land use has changed since the original document was completed. Much of the area that was covered with vegetation when the original study was completed now has commercial development and roadways leading to that development. This change has decreased the level of intactness through the study area.



Source: King County GIS (2005).

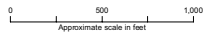
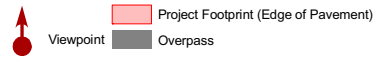


FIGURE 3.14-1  
Viewpoints in the Study Area  
SR520 West Lake Sammamish Parkway to SR 202

File Path: P:\9\SDOT\184764SR520\GIS\Layouts\Viewpoints.mxd

Beginning on the project's west end, looking to the north side of SR 520 beyond Bear Creek and its buffer, the land was formerly the old Redmond Golf Course. This site is now covered by the Redmond Town Center, a business and shopping complex with two- to six-story buildings. Bear Creek Parkway has been constructed behind the shopping center. The vegetated buffer along Bear Creek has matured to heights and densities that provide a pleasing natural appearance. The bicycle and pedestrian trail is now located in the vegetated area along the north side of Bear Creek. Marymoor Park is located south of SR 520. The vegetation between SR 520 and the park use areas has grown and now provides more of a visual buffer for the park users.

Traveling east, as SR 520 begins to curve north, the Bear Creek relocation and wetland mitigation area is located in the southwest quadrant of the SR 520 and SR 202 interchange. This area has been planted with native plants and is establishing well. The area to the northeast of the interchange is now covered with a large commercial development. This area was covered by mature evergreen forest when the original study was completed. The land adjacent to the southeast quadrant and the northwest quadrant remains similar to when the original study was completed.

## Views toward the Existing Facility

Beginning on the west end of the project, the view toward the SR 520 mainline from the Redmond Town Center on the north side of the highway is in the background of views from the upper floors of the buildings and as motorists approach the street that runs along the south perimeter of the site. A distant view of SR 520 can be seen to the west from the southwestern perimeter of Redmond Town Center as the highway climbs the slope (Figure 3.14-2). Vegetation along Bear Creek effectively screens out most views of SR 520 from Redmond Town Center and the perimeter street, except for very slight views of an occasional flash of color through the foliage as a large or colorful vehicle passes by. Pedestrians within the Town Center are not oriented toward SR 520, so have little to no view of the highway.



**FIGURE 3.14-2**

Viewpoint 5: Looking West from Redmond Town Center



From the trail along Bear Creek, there is vegetative screening between the viewer and SR 520. Trail users have glimpses of passing vehicles on SR 520 visible through the vegetation. Views of SR 520 from Marymoor Park are reduced from the previous condition in 1992 due to maturing vegetation, which increases the level of intactness.

In the vicinity of the SR 520 and SR 202 interchange, the vegetation along Bear Creek and buildings block views from the west toward SR 520. The bridge structure and filled areas of the interchange are not apparent for most viewers, with the exception of drivers on SR 202 once they get quite close to SR 520. Traveling from the east on SR 202, the grassy abutment at the north of the bridge is more apparent in the view toward the SR 520 interchange, but not until the viewer is near the interchange; this is because the curve in SR 202 creates an angle of approach that prevents an earlier view (Figure 3.14-3).



**FIGURE 3.14-3**  
Viewpoint 3: Looking Northwest from SR 202

Views from the adjacent businesses in the southeast quadrant of the SR 520 and SR 202 interchange include the interchange-filled slopes and bridge structure to a greater degree than when the original study was completed; this is due to the raised height of the interchange in the landscape and larger area that it covers. The most affected views are for the business buildings nearest to the highway. The vegetation that is located between SR 520 and these businesses has grown to provide more of a visual buffer. Also, plants on the embankment of the interchange help to filter the views of SR 520.

In 1992, the view of SR 520 from businesses adjacent to the northwest quadrant of the interchange was readily available because vegetation along Bear Creek had not matured to become a screen. Today the vegetation that has matured blocks the view from the northwest adjacent land uses of the study area. The view from the upper floors of the adjacent buildings may have openings in the vegetation through which the interchange can be seen.

The land to the northeast of the SR 520 and SR 202 interchange has been developed with a large business complex. These businesses are oriented away from the highway so the views of the interchange area are from behind the buildings, where very few viewers are exposed. New vegetation provides a buffer between these land uses, but it is still too small to effectively screen. Motorists traveling west on NE 76th Street from this complex are the viewers that have the most exposure to the bridge and the embankments of the highway interchange (Figure 3.14-4).



**FIGURE 3.14-4**  
Viewpoint 4: Looking West from NE 76th Street

## Views from the Existing Facility

Starting from the western edge of the project, in 1992 the view along SR 520 moving east included cut slopes planted with erosion control grasses; today, these slopes also have native trees and shrubs. As the traveler approaches the SR 901 interchange, the view opens to overlook the valley. In 1992, this view included the Redmond Golf Course to the north, which contributed to a higher level of intactness. Now the view toward the north is of the Redmond Town Center complex beyond the well-vegetated Bear Creek corridor (Figure 3.14-5). The vegetation along Bear Creek and the vegetation in the complex help to blend this development into the landscape; however, due to the increase in the level of human-built elements in the view, the intactness is reduced. As the eastbound viewer descends into the valley and becomes level with the surrounding landscape, the view of Redmond Town Center quickly vanishes, becoming highly screened by the maturing native vegetation along both sides of Bear Creek. The vegetation along Bear Creek has grown since 1992 to provide a substantial buffer of the Town Center. This vegetation provides a higher level of intactness through this part of the corridor.

Travel across the valley floor provides views level to the surrounding area. The vegetation along both sides of the highway has matured to provide a natural-appearing foreground (Figure 3.14-6).



**FIGURE 3.14-5**  
Viewpoint 1: Looking East from the West End of the Project



**FIGURE 3.14-6**  
Viewpoint 2: Looking East

The view to the south of Marymoor Park is similar to that of 1992 except that the maturing vegetation buffers or filters the views into the park. In 1992, views of the park's athletic fields, light poles, and the velodrome were quite prominent elements. Today, the athletic fields are still visible, but the view of the velodrome is of much shorter duration because of the greater maturity of trees near the SR 520 mainline.

Continuing east, SR 520 begins to curve to the north as it approaches the intersection of SR 202 with SR 520. In 1992, the viewer was level with the surrounding landscape as the highways met at an at-grade intersection. Today, as the driver goes around the curve, the highway rises on embankments to the bridge across SR 202. Viewers on the highway are elevated with a view

over the landscape. The highway barrier limits views from the roadway. The amount of view available depends noticeably on driver position nearer or farther from the barrier. Maturing trees along the roadside somewhat screen adjacent land uses. The eastbound SR 520 off-ramp to SR 202 has vegetation on both sides of the ramp that helps to soften the appearance of the embankment, filters the views of adjacent commercial development, and provides a sense of entry into the City of Redmond.

Motorists on SR 202 viewed the interchange area from a level view when the original study was completed. Now the views from SR 202 are from an inferior position, with the embankments and the bridge structures of the interchange dominant features in the view.

Businesses in the southeast quadrant were fairly exposed in views from SR 520 in 1992. The vegetation between the roadway and the adjacent properties has grown to provide more of a natural buffer that transitions the land uses.

The area to the northeast of the interchange could be seen in 1992 as a mature forested area. The view from the highway is now of the commercial complex. Due to the highway elevation, the barrier limiting views, and the vegetation providing screening, the view is mostly the tops of the buildings with associated signing that can be seen.

The view from the highway toward the southwest quadrant of the SR 520 and SR 202 interchange is of the Bear Creek relocation and wetland mitigation areas. In 1992, this area had some vegetation that separated the highway from the adjacent land use, but today the area has increased in size and has had additional plants added to the buffer. Even though the recently planted plants are not fully grown, this buffer's effectiveness has increased. This area is a highly natural component of the view that separates the viewers on the highway from the development beyond.

Landscape views beyond the northwest quadrant of the interchange have changed little from the original evaluation of this project. Bear Creek and the vegetated buffer separate the highway from the adjacent land use. Vegetation in this area has become taller and denser over time so it now creates a visual separation.

North of the SR 520 and SR 202 interchange in 1992, there were grass fields in the foreground views on either side of Avondale Road (the north end of SR 520). Today there is commercial and business development and the associated parking areas immediately adjacent to the highway. A narrow buffer of trees and shrubs separates these developments from the highway. Very little of these developed areas are visible to the highway user because of this vegetative buffer, the traffic barrier that blocks some of the view, and the elevated level of the highway.

Traveling from the north on SR 520/ Avondale Road, views to the south are no longer dominated by the motor inn and the commercial development in the southeast quadrant that existed in 1992. The rising highway and the bridge structure of the interchange now dominate these views. Highway users now view over the development to the southeast from an elevated position and vegetation filters most of these views.

As travelers proceed westbound to the level area of the highway, viewers from the mainline experience a more vegetated view than was the case in 1992, even with the development of Redmond Town Center. This is because the vegetation along Bear Creek, in the view north, and existing vegetation to the south is more mature.



# Impacts

## Change to the Visual Environment

The project's construction would complete the expansion of SR 520 from two lanes in each direction to four lanes in each direction. One of these lanes in each direction would be an HOV lane. Widening between the West Lake Sammamish Parkway and the SR 202 interchanges would occur to the north. Retaining walls would be used to keep the encroachment on the Bear Creek corridor to a minimum. On the west end, these walls would range in height from 4 to 20 feet. On the east end, the walls would range from 4 to 6 feet tall. These walls would be viewed from adjacent properties. Water quality ditches would be located along the roadside through this section of the project.

The ramps at the SR 520 and West Lake Sammamish Parkway interchange would be reconfigured to reduce the radius of the ramps, and bridges would be added across the Sammamish River to accommodate these ramps. Retaining walls ranging from 4 to 16 feet would be used on part of both sides of the two ramps. Travelers on SR 520 and the West Lake Sammamish Parkway would see these walls.

In the SR 520 and SR 202 interchange area, the mainline would be widened. Bridges and retaining walls would be added to accommodate this widening. An additional ramp would be added to connect westbound SR 202 to southwestbound SR 520 (Figure 3.14-7). This ramp would curve from SR 202 into the northeast quadrant of the interchange, pass under the bridge at NE 76th Street, and then rise rapidly to a new bridge over SR 202 parallel to the current SR 520 mainline bridge over SR 202. Retaining walls would also be used for the new ramp. The ramp would then continue to meet SR 520 as the existing ramp merges into it. The new retaining walls in the interchange would range from 4 to 16 feet and would be visible looking toward the highway from the west. A large water treatment pond would be located in the northeast quadrant area between the ramp and SR 202; the existing ponds in the southwest quadrant might also be enlarged.

Vegetation would be reduced along the Bear Creek corridor to accommodate the widening. This would decrease the buffer that separates the land uses and provides the natural element in the view. Vegetation in the areas within the West Lake Sammamish Parkway and the SR 202 interchanges would also be disrupted. Most of these areas are currently planted with grasses from Stage One of the project in anticipation of this project's disruptions that would occur, so the impact would be minor.

## Change in Views from the Facility

For views from the highway, the addition of paved area, roadway embankments, retaining walls, and bridge structures would increase the built environment of the area, which would increase overall encroachment and decrease overall intactness. The reduction of the vegetative buffer along Bear Creek would also decrease intactness. The SR 520/SR 202 interchange would appear more massive in the landscape. Most views of the Redmond Town Center would remain unchanged. The vegetation along the Bear Creek corridor would continue to screen or filter views of the Town Center, although the occasional views may increase due to the reduced density of the buffer.



Note: Subject to change.

FIGURE 3.14-7  
 Photo Simulation of the Project  
 Flyover Ramp and Bicycle and  
 Pedestrian Path  
 SR 520/West Lake Sammamish Parkway to SR 202

## Change in Views toward the Facility

Views toward the corridor would also remain similar to currently existing views. Trail users on the Sammamish River trail would have a different visual experience as they pass under additional bridge structures. Travelers on West Lake Sammamish Parkway would also experience the widened bridge structures as they pass under, and might see the retaining walls added to the interchange area to accommodate the new ramp configuration.

Views from Marymoor Park would be similar to existing views because the level of the park in relationship to the mainline would not change. There would be a difference in the view toward the northwest from the park, where the roadway embankment would be replaced by a retaining wall that is up to 20 feet in height. This wall would increase human-built elements in the view.

Views from the Redmond Town Center and the trail along Bear Creek would remain similar to the views that currently exist. The vegetation along the Bear Creek corridor would continue to screen or filter views from these areas, although the occasional views may increase due to the reduced density of the buffer.

In the vicinity of the SR 520/SR 202 interchange, changes of views toward the highway mostly occur for views from the west of the interchange. This is due to the major change occurring on the west side of the SR 520 mainline associated with the project. The new bridge structures, retaining walls, embankments and additional paved areas would be visible as people travel east on SR 202 from Redmond city center. The vegetation along the Bear Creek corridor would continue to provide a visual buffer for views from adjacent properties. The visual change on the east side of the interchange would be for motorists traveling west on SR 202, and from NE 76th Street. These views would look toward the ramp looping into the northeast quadrant of the interchange and under the SR 520 bridge crossing NE 76th Street. Views of the ramp would be from a similar level, so it would not be a dominant element in the view. The water treatment pond inside loop of the ramp would also be visible. Some of the large trees along the northeast right-of-way line would be removed to accommodate the ramp, resulting in a reduction of the buffer. Very few viewers looking toward the facility would notice this change, because they would be from the back of the Home Depot and Fred Meyer buildings.

## Mitigation Measures

The *Roadside Classification Plan* (WSDOT 1996) treatment levels provide a framework for the mitigation of this project. Mitigation measures developed for the EIS remain unchanged.

### Mitigation during Construction

Desirable existing vegetation would be preserved and protected to the greatest extent possible. Disturbed soil would be covered with vegetation as soon as possible. To minimize negative visual impacts during construction the following could occur: minimize scattered construction debris within the study area, clean-up construction areas regularly, and pick-up litter throughout the project limits.

## Mitigation during Operation

The vegetative buffer along the roadside would be restored in accordance with the *Roadside Classification Plan* using primarily native plant species. Where the right-of-way is narrow, the plant density would be increased to achieve a sufficient buffer and transition between land uses. As the project approaches the SR 520 and SR 202 interchange, the planting design would transition to a more urban appearance from the natural appearance currently being used in the corridor to visually identify the entrance of Redmond. At this interchange, the planting would be consistent with the planting that was completed in Stage One of the project. As the project ties into the community, where the ramps enter or leave SR 202, street trees would be used to transition to the urban setting.

Bridges would be designed to complement the existing ones and provide unity. Color and textural treatments would be chosen to help the new structures blend into the environment; plants adjacent to the walls would soften their appearance and make them less intrusive to the wider views.